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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,255	09/15/2003	William F. Courtney	12489US02	2407

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EXAMINER

VUONG, QUOCHIE B

ART UNIT PAPER NUMBER

2685

DATE MAILED: 04/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/662,255	Applicant(s) COURTNEY ET AL.	
	Examiner Quochien B Vuong	Art Unit 2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 38-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 38-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: page 1, in CROSS_REFERENCE TO RELATED APPLICATIONS section, paragraph [0001], after "...March 1, 2000" insert --, now U.S. Pat. No. 6,665,518--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 44-49 are rejected under 35 U.S.C. 102(e) as being anticipated by Haartsen (US 6,650,630).

Regarding claims 44 and 47, Haartsen discloses a communication system and a method for assigning bandwidth to a terminal in a communication system, comprising: a terminal (remote terminal) communicating using an uplink and a downlink, the uplink having an assigned uplink bandwidth and the downlink having an assigned downlink bandwidth; and a controller (figure 5, multi-radio base station 500) assigning at least

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one of the assigned uplink bandwidth and the assigned downlink bandwidth (column 4, line 52 – column 5, line 16; column 6, lines 3-8), wherein the assigned uplink bandwidth differs from the assigned downlink bandwidth (column 7, lines 12-41).

Regarding claims 45 and 48, Haartsen discloses the assignment of at least one of the assigned uplink bandwidth and the assigned downlink bandwidth occurs dynamically (column 7, lines 34-41).

Regarding claims 46 and 49, Haartsen discloses the assignment of at least one of the assigned uplink bandwidth and the assigned downlink bandwidth is based on a bandwidth demand of at least one of the uplink and the downlink (column 13, lines 14-26).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zenick, Jr. et al. (US 6,128,469) in view of Haartsen (US 6,650,630).

Regarding claim 38, Zenick, Jr. et al. (figure 6) disclose a communication system including: a satellite (200), and a terminal (RTU 250) communicating with the satellite using an uplink and a downlink (column 8, lines 7-39). Zenick, Jr. et al. do not specifically disclose the uplink having an assigned uplink bandwidth and the downlink

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having an assigned downlink bandwidth, and wherein the assigned uplink bandwidth differs from the assigned downlink bandwidth. However, Haartsen disclose an uplink having an assigned uplink bandwidth and a downlink having an assigned downlink bandwidth (column 4, line 52 – column 5, line 16; column 6, lines 3-8), wherein the assigned uplink bandwidth differs from the assigned downlink bandwidth (column 7, lines 12-41). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the assigned uplink and downlink bandwidth of Haartsen to the communication system of Zenick, Jr. et al. in order to better allocate resource and control of asymmetric traffic as suggested by Haartsen (column 4, lines 30-36).

Regarding claim 39, Zenick, Jr. et al. and Haartsen disclose the communication system of claim 38 above. In addition, Haartsen discloses the assignment of at least one of the assigned uplink bandwidth and the assigned downlink bandwidth occurs dynamically (column 7, lines 34-41).

Regarding claim 40, Haartsen discloses the assignment of at least one of the assigned uplink bandwidth and the assigned downlink bandwidth is based on a bandwidth demand of at least one of the uplink and the downlink (column 13, lines 14-26).

Regarding claim 41, Zenick, Jr. et al. (figure 6) disclose a communication system including: a satellite (200), and a terrestrial transceiver (280) communicating with the satellite using an uplink and a downlink (column 8, lines 7-39). Zenick, Jr. et al. do not specifically disclose the uplink having an assigned uplink bandwidth and the downlink

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having an assigned downlink bandwidth, and wherein the assigned uplink bandwidth differs from the assigned downlink bandwidth. However, Haartsen disclose an uplink having an assigned uplink bandwidth and a downlink having an assigned downlink bandwidth (column 4, line 52 – column 5, line 16; column 6, lines 3-8), wherein the assigned uplink bandwidth differs from the assigned downlink bandwidth (column 7, lines 12-41). Therefore, it would have been obvious for one having ordinary skill in the art at the time the invention was made to adapt the assigned uplink and downlink bandwidth of Haartsen to the communication system of Zenick, Jr. et al. in order to better allocate resource and control of asymmetric traffic as suggested by Haartsen (column 4, lines 30-36).

Regarding claim 42, Zenick, Jr. et al. and Haartsen disclose the communication system of claim 40 above. In addition, Haartsen discloses the assignment of at least one of the assigned uplink bandwidth and the assigned downlink bandwidth occurs dynamically (column 7, lines 34-41).

Regarding claim 43, Haartsen discloses the assignment of at least one of the assigned uplink bandwidth and the assigned downlink bandwidth is based on a bandwidth demand of at least one of the uplink and the downlink (column 13, lines 14-26).

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

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1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 38-49 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 16 of U.S. Patent No. 6,665,518. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Regarding claim 38, 41, and 44, claim 16 of U.S. Patent No. 6,665,518 encompasses all the claimed limitation including: a communication system including: a satellite, and a terminal or terrestrial transceiver communicating with the satellite using an uplink having an assigned uplink bandwidth and a downlink having an assigned downlink bandwidth, wherein the assigned uplink bandwidth differs from the assigned downlink bandwidth.

Regarding claim 39, 42, and 45, claim 16 of U.S. Patent No. 6,665,518 encompasses all the claimed limitation including wherein at least one of the assigned uplink bandwidth and the assigned downlink bandwidth is dynamically adjusted.

Regarding claim 40, 43, and 46, claim 16 of U.S. Patent No. 6,665,518 encompasses all the claimed limitation including wherein at least one of the assigned uplink bandwidth and the assigned downlink bandwidth is adjusted according to a bandwidth demand of at least one of the uplink and the downlink.

Regarding claim 47, claim 1 of U.S. Patent No. 6,665,518 encompasses all the claimed limitation including: a method for assigning bandwidth to a terminal in a communication system, the method including: assigning an uplink bandwidth to an uplink of a terminal; and assigning a downlink bandwidth to a downlink of the terminal, wherein the assigned uplink bandwidth differs from the assigned downlink bandwidth.

Regarding claim 48, claim 1 of U.S. Patent No. 6,665,518 encompasses all the claimed limitation including dynamically adjusting the assignment of at least one of the uplink bandwidth and the downlink bandwidth.

Regarding claim 49, claim 1 of U.S. Patent No. 6,665,518 encompasses all the claimed limitation including wherein the dynamic adjustment at least one of the uplink bandwidth and the downlink bandwidth is based on a bandwidth demand of at least one of the uplink and the downlink.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Acampora et al. (US 4,425,639) disclose satellite communications system with frequency channelized beams.

Floury et al. (US 5,963,845) disclose satellite payload with integrated transparent channels.

Monte et al. (US 6,101,385) disclose satellite communication service with non-congruent sub-beam coverage.

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Sarraf et al. (US 6,175,719) disclose multi-spot-beam satellite with broadcast and surge capacity capability.

Karabinis (US 6,650,868) discloses mobile satellite phone system incorporating symmetric and non-symmetric waveform modes.

Klein et al. (US 6,707,798) disclose a method and apparatus for reducing co-channel interference in a frame-synchronized wireless communication system.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quochien B Vuong whose telephone number is (571) 272-7902. The examiner can normally be reached on M-F 9:30-18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



QUOCHIE B. VUONG
PRIMARY EXAMINER

Quochien B. Vuong
Mar. 31, 2005.